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Date: October 20, 2003

To: Sikyin Ip, Examiner
U.S. Patent and Trademark Office

Re: U.S. Patent Appln. S.N.: 09/966,389
Attorney Docket No.: 020960

Fax Number: (703) 872-9577

Number of Pages: 6

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Attachments: Communication – Supplementary European Search Report



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Europäisches
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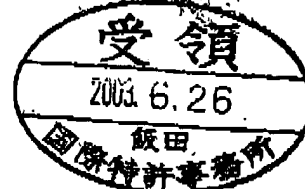
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Patentanwälte



Datum/Date

17.06.03

Zeichen/Ref./Rif.

12574Furukawagr

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

01934329.2-2122-JP0104351

Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire

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COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





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**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 01 93 4329

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X A	US 4 612 167 A (SAKAMOTO DAIZI ET AL) 16 September 1986 (1986-09-16) * claims 1-8 * * examples 1,2 * * tables 1,2 *	1-4,9,10 5-8, 11-14	C22C9/05 C22C9/04
X A	US 5 463 247 A (FUTATSUKA RENSEI ET AL) 31 October 1995 (1995-10-31) * claims 1-8 * * column 4, line 29 - column 6, line 28 * * tables 1-3 *	1-4,8,9, 14 5-7, 10-13	
X A	EP 0 949 343 A (KOBE STEEL LTD) 13 October 1999 (1999-10-13) * claims 1-9 * * tables 1-5 *	1-3,9 4-8, 10-14	
X A	EP 0 440 548 A (KOBE STEEL LTD) 7 August 1991 (1991-08-07) * claim 1 * * tables 1,2 * * page 3, line 10 - page 4, line 29 *	1-4,9 5-8, 10-14	TECHNICAL FIELDS SEARCHED (Int.Cl.7) C22C
X A	EP 0 501 438 A (MITSUBISHI SHINDO KK) 2 September 1992 (1992-09-02) * claims 1,2 * * tables 1-3 *	1-4 5-14	
X A	US 4 656 003 A (MIYAFUJI MOTOHISA ET AL) 7 April 1987 (1987-04-07) * tables 1-4 * * column 6, line 50 - column 10, line 48 * -/-	1-4	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search THE HAGUE		Date of completion of the search 6 June 2003	Examiner Vlassi, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.02 (P04C04)



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**SUPPLEMENTARY
EUROPEAN SEARCH REPORT**

Application Number
EP 01 93 4329

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X A	US 5 846 346 A (KIM IN DAL ET AL) 8 December 1998 (1998-12-08) * claims 1-9 * * table 1 *	1-3,9 4-8, 10-14	
X A	US 4 687 633 A (MIYAFUJI MOTOHISA ET AL) 18 August 1987 (1987-08-18) * claims 1-7 * * tables 1-3 * * column 3, line 45 - column 6, line 42 *	1-4,9 5-8, 10-14	
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 259 (C-1061), 21 May 1993 (1993-05-21) -& JP 05 001367 A (MITSUBISHI ELECTRIC CORP), 8 January 1993 (1993-01-08) * abstract *	1-14	
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 10, 31 August 1999 (1999-08-31) -& JP 11 140569 A (MITSUBISHI SHINDOH CO LTD), 25 May 1999 (1999-05-25) * abstract *	1-14	
A	US 6 040 067 A (ENDO TAKAYOSHI ET AL) 21 March 2000 (2000-03-21) * claims 1-6 * * examples 1-4 *	1-14	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
<p>The supplementary search report has been based on the last set of claims valid and available at the start of the search.</p>			
Place of search THE HAGUE		Date of completion of the search 6 June 2003	Examiner Vlassi, E
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 01 93 4329

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The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-06-2003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4612167	A	16-09-1986	JP	60184655 A	20-09-1985
			JP	61159541 A	19-07-1986
			JP	63004890 B	01-02-1988
			JP	61157650 A	17-07-1986
			JP	1542633 C	15-02-1990
			JP	61157651 A	17-07-1986
			JP	63030979 B	21-06-1988
US 5463247	A	31-10-1995	JP	2797846 B2	17-09-1998
			JP	5345941 A	27-12-1993
			DE	4319249 A1	16-12-1993
EP 0949343	A	13-10-1999	JP	11335756 A	07-12-1999
			EP	0949343 A1	13-10-1999
			US	6334915 B1	01-01-2002
EP 0440548	A	07-08-1991	JP	2977845 B2	15-11-1999
			JP	3226536 A	07-10-1991
			EP	0440548 A2	07-08-1991
EP 0501438	A	02-09-1992	JP	2503793 B2	05-06-1996
			JP	4276036 A	01-10-1992
			DE	69202080 D1	24-05-1995
			DE	69202080 T2	14-09-1995
			EP	0501438 A1	02-09-1992
US 4656003	A	07-04-1987	JP	1740062 C	15-03-1993
			JP	61099647 A	17-05-1986
			JP	62031059 B	06-07-1987
			JP	1740064 C	15-03-1993
			JP	61127842 A	16-06-1986
			JP	62031060 B	06-07-1987
			DE	3566904 D1	26-01-1989
			EP	0189637 A1	06-08-1986
			HK	40292 A	12-06-1992
			KR	9004109 B1	15-06-1990
			SG	21789 G	14-07-1989
US 5846346	A	08-12-1998	KR	157257 B1	16-11-1998
			DE	19643378 A1	12-06-1997
US 4687633	A	18-08-1987	JP	61177344 A	09-08-1986
			JP	1515092 C	24-08-1989
			JP	61177348 A	09-08-1986
			JP	62050535 B	26-10-1987
			DE	3660351 D1	04-08-1988

EPO FORM P438

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 93 4329

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The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-06-2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4687633 A		EP 0189745 A1	06-08-1986
JP 05001367 A	08-01-1993	NONE	
JP 11140569 A	25-05-1999	NONE	
US 6040067 A	21-03-2000	JP 10025562 A US 6180174 B1	27-01-1998 30-01-2001

EPO FORM P0469

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82